

XIII.—New Indo-Malayan Species of Lepidoptera.

By Colonel C. SWINHOE, M.A., F.L.S., &c.

Family Limniinæ.

Salatura affinis olga, nov.

♂. Blackish brown with a slight bronzy tinge, markings white: fore wing with a slight streak beyond the middle of the cell, a spot on the middle of the discocellulars, two subcostal spots above it, the lower one linear; a subapical series of spots as in *affinis*, but all very small, the three near the costa quite minute; a short white bar at the base of interspace 2, a long one below it as in *affinis*, a small round spot beyond the upper bar, and a double row of small round submarginal spots, some of the upper and lower ones more or less obsolete: hind wing with the white middle band divided by the veins much as in *affinis*, but with the outer ends rounded; a double submarginal row of spots, the lower abdominal area pale brownish grey. Underside differs materially from that of *affinis*: fore wing with the markings as on the upperside: hind wing without any of the orange spots which are present in *affinis*; the markings as on the upperside, a V-shaped dislocated mark below the costa near the base, and no markings whatever between the central white part and the submarginal double series of white spots.

Expanse of wings, ♂, 3 inches.

Hab. New Britain.

The underside much resembles the underside of *S. decentralis*, Fruhstorfer, from Bangkei (Berl. ent. Zeit. 1899, p. 69).

Salatura affinis nora, nov.

♀. General pattern and colour very similar to that of *olga*; the palpi, head above and below, and the thorax beneath prominently white-spotted, the wings with all the white bands and spots much larger and more extended: fore wing with a white spot on the centre of the costa, the white spot outside the upper white bar not present. On the underside the basal portion of the fore wing is suffused with a bronzy tinge, the underside of the hind wing as in *olga* and also without any orange markings.

Expanse of wings, ♀, $3\frac{2}{10}$ inches.

Hab. Kiriwini Island, Tobriand group.

Family Nymphalidæ.

Dracænura arfakalis, nov.

♂ ♀. Frons, head, and thorax dark brown: fore wing dark copper-brown, shining, uniform in colour; an indistinct black spot in the cell and another at the end, no other markings: hind wing pure white, with an all-round marginal band of the colour of the fore wing, well defined, thickest at the apex, slightly suffused on its inner margin; cilia of both wings white. Antennæ grey, with pure white points on the joints; abdomen with the basal half white, outer half blackish; anal tuft white. Underside: wings as above, fore wing paler in colour; palpi brown; face, pectus, body, and legs white.

Expanse of wings, ♂ ♀; $1\frac{2}{5}$ inch.

Hab. Arfak Mountains, North New Guinea, 4000', 6000' (*Pratt*).

Family Lycænidæ.

Rapala francesca.

Rapala francesca, Swinhoe, Lep. Ind. ix. p. 52, pl. 716. figs. 4, 4 a, ♂ (1911).

♀. Upperside paler purplish black than in the male and without the gloss; underside bright ochreous yellow; all the markings above and below (except, of course, the sexual patch) exactly as in the male.

Expanse of wings, ♀, $1\frac{6}{10}$ – $1\frac{7}{10}$ inch.

Hab. Khasia Hills.

Two examples received with two males from my native collector in Cherra Puiji.

Loxura atymnus luzonica, nov.

♂. Upperside much as in *L. arcuata*, Moore, from Ceylon, but the outer marginal black band of the fore wing is more attenuated towards the hinder angle; the outer marginal brown line of the hind wing is a mere thread and the cilia are pale yellowish. Underside differently coloured to any of the other forms of this group, being of a very clear and pure and uniform dark orange-ochreous tint, the markings almost obliterated, the two outer transverse lines only slightly visible on either wing and straighter and nearer to each other than usual.

♀. Paler than in the male, the outer marginal black band broader, the outer margin of the hind wing rather broadly

shaded with grey atoms in the interspaces; the underside much paler, and consequently the outer transverse lines on both wings somewhat more distinct.

Expanse of wings, ♂ ♀, $1\frac{1}{2}$ inch.

Hab. Luzon, Philippines.

Two males and one female.

Mentioned by Fruhstorfer in Stett. ent. Zeit. lvi. p. 221 (1911).

Family Deilemeridæ.

Deilemera kiriwina, nov.

♀. Palpi, frons, head, and thorax deep black, frons with a white streak on each side; a white spot between the bases of the antennæ, a pink line behind each eye, white spots on the collar, shoulders, and thorax (three on each side); abdomen greyish white, three large grey spots on the first segment, with a row of white spots above them, a very large black spot on the anal segment, the rest of the abdomen without any markings: fore wing very deep black, an oblique discal band of very large, conjoined, white spots from the costa to vein 2, the vein-markings very lightly separating them; cilia black, with a white streak below the apex and another at the anal angle, the upper part of this streak extending very shortly into the wing: hind wing white, a broad deep black marginal band, its inner edge slightly sinuous; cilia black, with a short white streak in the middle. Underside: wings as above; fore wing with white basal streaks on the subcostal and median veins; thorax black, with some white marks and some pink streaks in front and at the sides; abdomen and legs white.

Expanse of wings, ♀, 2 inches.

Hab. Kiriwini Island, Tobriand group.

Not allied to any form known to me.

Deilemera latera, nov.

♀. Belongs to the *baulus* group. Palpi white, last joint black; head luteous, a large black spot on the frons, one at the base of each antenna, and another behind; collar, thorax, and abdomen white, two spots on the collar, three stripes on the thorax, three spots at the base of the abdomen, and a thin black band on each segment: fore wing black, the veins not pale as is usual in this group; the discal macular band as in *baulus*, but there are only five spots, all much smaller and well separated from each other: hind wing white,

with black marginal band as in *baulus*. On the underside the body and legs are pure white, with some black spots on the thorax and a double row of black spots on each side of the abdomen.

Expanse of wings, ♀, $1\frac{7}{10}$ inch.

Hab. Kiayih, Central Formosa.

Its pure white body separates it from all the other species of this group known to me.

Deilemera everetti, nov.

♂ ♀. Palpi with the first joint yellow, the rest black; frons yellow, with a black medial spot, yellow round the eyes, collar, and thorax, black between the bases of the antennæ and a black line behind; neck with a black spot on each side; thorax with a broad black band down the middle and a narrower band on each side; abdomen black, with thin yellow segmental bands: fore wing deep black, the veins not marked, the usual discal white band of the *baulus* group, but narrow and less oblique, the spot in the third interspace well separated from the others, the spot in the second the largest of all: hind wing white, with some black suffusion at the base and a deep black broad marginal border running thinly up the abdominal margin for a short distance, slightly angled inwards on the veins; a larger angle at vein 2; cilia of both wings uniformly deep black. Underside as on the upperside, the colour deep black; thorax and abdomen yellow, with black medial and lateral spots; legs black streaked with yellow.

Expanse of wings, ♂ ♀, 2 inches.

Hab. Flores (*Everett*).

Family Lymantriidæ.

Dasychira multilineata, nov.

♂. Palpi black at sides, white in front; frons white; fore part of thorax white with grey hairs, hind part dark grey with white hairs on each side; abdomen ochreous grey without markings; antennæ ochreous grey, shaft pure white: fore wing with the ground-colour white, densely irrorated with grey atoms, transverse lines dark brown, mostly highly dentate—one subbasal, acutely angled, with some white on its outer side, three close together, antemedial, one closing the cell and extending to the costa, one postmedial with indications of another close beyond it, one submarginal with some

streaks on the veins running from the margin to the post-medial line; cilia brown: hind wing ochreous grey, with a suffused brownish border, broad on the costa and at the apex, narrowing hindwards, where it becomes submarginal. Under-side ochreous grey; fore wing with all but the costa, outer and hinder margins suffused with brown, a darker brown suffused mark at the end of the cell: hind wing with a brown lunular mark at the end of the cell; body and legs ochreous grey.

Expanse of wings, ♂, $1\frac{9}{10}$ inch.

Hab. Au San, Central Formosa.

Of the shape of *D. strigata*, Moore (Lep. Atk. p. 56, 1879).

Family Noctuidæ.

Subfamily NOCTUINÆ.

Pleurona simillima, nov.

♂. Of a uniform ochreous-fawn colour; markings above and below similar to those of *P. fulcata*, Walker, of which I have a good series from India and Java; but the fore wing is not falcate, it is slightly arched towards the apex, which is not produced, and the outer margin is evenly rounded, not excurved before the middle as in *fulcata*, and the cilia is uniformly dark brown, without any white below the apex.

Expanse of wings, ♂, $1\frac{3}{10}$ inch.

Hab. Rangoon, Andamans.

Subfamily FOCILLINÆ.

Zethes limbalis, nov.

♂. Wings shaped as in *Z. inornata*, Walker, xxxiii. p. 848 (1865), described without locality. I have examples, however, that are identical with Walker's type from Simla and Assam; the fore wings are longer and the outer margins of both wings are crenulate, in *inornata* they are smooth; colour throughout of a uniform glaucous-ferruginous, as in *inornata*, but paler; the underside is very pale glaucous-grey, very uniform in colour, and without any markings; on the upper-side there is a black dentated line beyond the middle across both wings, outwardly curved from the costa of the fore wing to vein 2, then nearly straight down to the hinder margin, and on the hind wing bent inwards on the internal vein; this line is edged with pale grey on both wings and has a broad

dark shade on each side of it; the abdomen is longer than usual and there is a large anal tuft.

Expanse of wings, ♂, $2\frac{2}{10}$ inches.

Hab. Su-tchen-shan, N. China.

Zethes sidonalis, nov.

♂. Of a uniform very pale ochreous-grey colour; thorax covered with black dots; abdomen with indistinct greyish segmental bands, anal tuft rather large; fore wing with a small black round spot in the cell; transverse lines brown, three zigzag lines at the base at equal distances apart, a sinuous line at the middle with a somewhat square outward protrusion below the costa, a lunular line at the end of the cell; a discal slightly sinuous line with a deep outward curve from the costa, then obliquely inwards to the hinder margin at two-thirds from the base; an obscure submarginal diffused band or shade, which contains a brown spot above the hinder angle: hind wing with a small black round spot in the cell, the discal line of the fore wing continued to the anal angle, and a brown spot outside its end; indications of the submarginal shade, but much paler than it is on the fore wing; both wings with submarginal brown dots and fine marginal line.

Expanse of wings, ♂, $1\frac{1}{2}$ inch.

Hab. Goping, Perak.

Capnodes gillolensis, nov.

♂ ♀. Somewhat resembling *C. ceylonica*, Moore, = *C. ca-duca*, Swinhoe, from Ceylon and South India. Fore wing with a black spot in the cell, another below it, and three in the form of a triangle at the end; a straight black oblique postmedial solid line in the male extending across both wings from vein 7, where it is acutely bent inwards to the costa, to the abdominal margin before the middle; in the female there are no traces of this prominent character, and there is no pale spot on the costa before the apex in either sex as in *ceylonica*, there is a thin dark shade from the apex of this line to the apex of the wing, and a highly crenulate line outside the straight line outwardly curved from its acute apex to near the hinder margin, then straight to the hind margin: on the hind wing there is a similar outwardly curved crenulate line and black marginal dots on both wings. Underside paler, no signs of the straight line; a blurred mark at the end of each cell, a narrow dark shade from the cell-mark of the fore wing to the middle of the abdominal margin of the

hind wing; a postmedial outwardly curved crenulate line from the costa of fore wing to the middle of the abdominal margin of the hind wing; except for the straight black line in the male the markings in both sexes are identical.

Expanse of wings, ♂ $1\frac{2}{10}$, ♀ $1\frac{1}{2}$ inch.

Hab. Gilolo Island (*Doherty*).

Family Hypenidæ.

Genus FOLKA, nom. nov.

Anepa, Swinhoe, Ann. & Mag. Nat. Hist. (7) xv. p. 502 (1905).

Type, *Hypena oxydata*, Hampson, Journ. Bomb. Nat. Hist. Soc. xi. (4) p. 707 (1898).

I had overlooked the fact that *Anepa* is preoccupied by myself in my monograph of the family Lymantriidæ in Trans. Ent. Soc. 1903, p. 478.

Folka bhagha, nov.

♀. Ochreous-fawn colour, paler than *oxydata*: fore wing with the colour of a pure uniform tint, indications of a transverse sinuous subbasal line, a white dot in the cell, an indistinct lunular mark at the end; an erect, rigid, and thick chocolate line or thin band from the costa one-fourth from the apex, straight down to the hinder margin one-fifth from the hinder angle; a very indistinct crenulate transverse line just beyond it; a brown subapical spot; two indistinct spots at the hinder angle; cilia chocolate-brown: hind wing much paler, with an indistinct, outwardly curved, discal greyish line.

Expanse of wings, ♀, $1\frac{2}{10}$ – $1\frac{3}{10}$ inch.

Hab. Khasia Hills.

Fore wing rather prominently angled in the middle, as in *oxydata* and *glaucescens*, Hampson, of which I have several examples of both sexes.

Bomolocha disualis, nov.

♂. Somewhat resembles in markings on the upperside *B. argialis*, Snellen*, from the Celebes, but is a larger insect: upperside olive-brown, a white dot at the base of each antenna; palpi, head, and body without markings: fore wing with an antemedial, indistinct, transverse brown sinuous line, the basal half of the wing much darker than the outer half,

* Tijds. voor Ent. xxiii. p. 118, and xxiv. pl. v. fig. 4 a (1881).

limited by a prominent, sinuous, transverse white line with broad black shading on its inner side; halfway between this and the outer margin is an indistinct line of black and white points, the upper two subapical, with a curved blackish mark below them; some white costal dots towards the apex of the wing: hind wing without markings; both wings with a black marginal line. Underside paler: fore wing with two or three subapical white dots, the hinder marginal space broadly whitish: hind wing with a discoidal brown spot; an outwardly curved, thin, median brown band, the outer margin rather broadly suffused with brown: body and legs dark brown without markings.

Expanse of wings $1\frac{2}{10}$ inch.

Hab. Kiriwini Island, Tobriand group.

Bomolocha tanis, nov.

♂. Head, body, and wings grey: fore wing with a black triangular patch from the base to the middle, where it is limited by a black transverse line from the costa to the hinder margin, with a rather acute outward angle at its middle, edged outwardly with white on its upper half; the black becomes diffuse towards the costa, showing a black spot in the cell; a curved black subapical mark edged with white on its upper side; two small black spots outwardly pricked with white immediately above it: hind wings grey without any markings. Underside: body, legs, and wings of a uniform pale grey colour; fore wing with a white costal spot one-fourth from the apex; three white costal dots at the apex and a subapical white spot.

Expanse of wings, ♂, $1\frac{8}{10}$ inch.

Hab. Kulu.

Like a diminutive *B. colombana*, Moore (Lep. Ceylon, iii. p. 223, pl. 176. fig. 8).

Family Boarmiidae.

Abraxas mosaria, nov.

♂. With narrow elongated fore wing as in *A. unisinuata*, Warren*; frons white, head white, collar ochreous, thorax and abdomen white; a black spot on the hinder part of the thorax; a row of black spots down the middle of the abdomen and a similar row on each side: wings white; fore wing mostly covered with pale black spots and patches; a cluster

* Nov. Zool. iv. p. 130 (1897).

of spots at the base; a patch on the costa before the middle, an angulated large costal patch beyond the middle, and two towards the apex, the first two patches more or less connected with macular bands running outwards, the subapical spot connected with a macular band curving inwards; many connected spots and patches on the outer third of the wing, all these marks very difficult to describe: hind wing with a discal outwardly curved row of well-separated small spots, three short bands of conjoined spots on the lower part of the abdominal margin, and a series of marginal spots—all these marks pale black; the wings are very lightly clothed, and consequently the markings of the underside are identical with the markings on the upperside.

Expanse of wings, ♂, $1\frac{1}{2}$ inch.

Hab. Kiayih, Central Formosa.

Family Pyralidæ.

Subfamily PYRAUSTINÆ.

Trichoptychodes delicata.

Trichoptychodes delicata, Swinhoe, Ann. & Mag. Nat. Hist. (6) xiv. p. 207 (1894).

Macaretæra hesperis, Hampson (nec Meyrick), Moths of India, iv. p. 296 (fig.) (1896).

Hab. Assam.

A common species in the Khasia Hills. I have received many examples from my native collector, all males. Sir George Hampson has sunk my genus and species to Meyrick's genus and species from Fiji, the unique type of which is a female, but he has described and figured the Assam male. It is impossible to believe that the two forms so many thousands of miles apart can have any connection with each other, and it is not scientifically justifiable to jump to such a conclusion on account of a similarity of pattern.

Heterocnephes ægialis, nov.

♂. Allied to *H. scapularis*, Lcd., of which I have a long series from New Guinea and from Goodenough Island, but is much larger; palpi and top of head pale ochreous; head, body, and wings chocolate-brown, much as in *H. scapularis* and *H. lymphatalis*, Swinhoe, from Assam, of which I have also a long series; thorax with four longitudinal whitish stripes; abdomen with ill-defined whitish segmental bands, anal tuft large, black: fore wing with a small, triangular, pale ochreous costal patch before the middle and another

twice as large beyond the middle; a pale, outwardly oblique, transverse line across the wing, passing just inside the first costal patch; a duplex, inwardly oblique, brown discal line across the wing passing along the outer margin of the second costal patch, with two pale ochreous-white marks on its outer edge below the costa: hind wing with a large pale ochreous spot in the centre above the middle; two outwardly curved, brown, discal lines, all the veins dark, the abdominal portion of the wing somewhat paler than the rest of the wing. Underside: wings paler in colour, the patches as on the upperside; no transverse lines; the basal part of the fore wing and the basal and abdominal portions of the hind wing suffused with pale ochreous; body and legs pale ochreous.

Expanse of wings, ♂, $1\frac{4}{10}$ inch.

Hab. Kiriwini Island, Tobriand group.

XIV.—Notes on Asteroidea. By WALTER K. FISHER,
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Poraniomorpha versus *Rhegaster*.—Professor A. E. Verrill, in the 'Annals & Magazine of Natural History,' ser. 8, vol. xiv. p. 17 (July 1914), states that the name *Rhegaster*, Sladen, 1883, has priority over *Poraniomorpha*, Danielssen & Koren, and should therefore be used if *Poraniomorpha*, *Rhegaster*, and *Lasiaster* constitute a single genus. This is an error. The genera date as follows:—

- (1) *Poraniomorpha*, Danielssen & Koren, "Fra den Norske Nordhavs-expedition," *Nyt. Mag. for Naturvidenskaberne*, vol. xxvi. 1880 (1881), p. 189. Type, *P. rosea*, monotypic.
- (2) *Rhegaster*, Sladen, *Trans. Roy. Soc. Edinburgh*, vol. xxxii. 1883, p. 155. Type, *R. murrayi*, Sladen, by designation ('Challenger' Asteroidea, 1889, p. 367).
- (3) *Lasiaster*, Sladen, 'Challenger' Asteroidea, 1889, p. 371. Type, *L. villosus*, monotypic.

In 'Asteroidea of the North Pacific,' 1911, p. 248, I used *Poraniomorpha* in the sense advocated by Dr. Grieg, to include *Rhegaster* and *Lasiaster*. I agree with Professor Verrill that it is better to include *Porania*, *Poraniomorpha*, and some of their allies in a family distinct from the Asteropidæ—namely, in the Poraniidæ of Perrier.

Mediaster and *Nectria*.—Dr. Hubert Lyman Clark has